

Amendments to the Specification:

Please amend the paragraphs of the specification as follows:

Please replace paragraph [53] with the following rewritten paragraph:

[53] Figure 4 shows the overall structure of the Bump-In-the-API (BIA) approach 402. IPv4 Applications 404 are at the highest layer. IPv4 applications 404 are above the socket API (IPv4, IPv6) 406. As shown in the figure, the BIA approach maps each IPv4 socket API into the IPv6 socket API. Thus, the BIA translator 408 intercepts the socket function calls. For BIA approach to work an IPv6 stack 410 needs to be available for the operating system and installed. As a result, the BIA approach will not work if there is no IPv6 stack 410 available.

Please replace paragraph [54] with the following rewritten paragraph:

[54] Figure 5 shows the API Level Translator structure 502. IPv4 applications 504 are at the highest layer. IPv4 applications 504 are above the socket API (IPv4) 506. As can be seen from Figure 5, in the API Level Translator approach IPv4 socket function calls are intercepted. However, since there is not an IPv6 stack (as is the case for BIA), it maps each function call to use raw sockets 510, supplies its own IP headers (for “send” operations) and uses the IPv4 stack 510 functionality. The following description gives details about the API Level Translator approach. As shown, the API Level Translator 508 may work on any system which supports raw sockets and the IP_HDRINCL or equivalent socket option, which allows supplying IP headers.

Please replace paragraph [61] with the following rewritten paragraph:

[61] In the BIA approach, the IPv4 application makes an IPv4 socket API call to send the data. The BIA module intercepts this function call and instead calls a corresponding IPv6 socket API function. The data will thus be passed to the IPv6 stack, which will add appropriate transport and

IPv6 headers. The IPv6 stack may also perform other functions and will pass the IPv6 packet to the network card driver 414.

Please replace paragraph [62] with the following rewritten paragraph:

[62] Figure 8 is a flow diagram illustrating a method 800 for an IPv4 application to send data using the ALT approach. In the ALT approach, the IPv4 application makes 802 an IPv4 socket API call to send the data. The ALT module intercepts 804 this function call. It has already mapped 806 the corresponding socket to a raw socket. The ALT provides 808 the appropriate transport and IPv6 headers. If necessary, it will perform 810 host-to-router tunneling. If necessary, it will fragment the packet 811. It will then call 812 the corresponding IPv4 socket API function for the raw socket and will pass 814 the packet to the IPv4 stack. The stack may perform 816 other functions (other than adding transport and IP headers) and will pass 818 the packet to the network card driver 512.

Please replace the abstract of the disclosure on page 21 with the following rewritten paragraph:

ABSTRACT OF THE DISCLOSURE

A system for enabling an IPv4 (Internet Protocol version 4) application to communicate across a computer network with an IPv6 (Internet Protocol version 6) system ~~is disclosed~~. The system includes a computing device and executable instructions. Executable instructions are configured to make a function call to an IPv4 socket Application Programming Interface (API). The instructions translate the function call to a translated function call wherein the translated function call uses raw sockets. Another function call is made to the IPv4 socket API for the translated function call that uses raw sockets. A packet is passed to an IPv4 stack.